# STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WASTE MANAGEMENT

### PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

Rachel Locklear 2161 Evergreen Church Road Pembroke, NC 28372

is hereby issued a permit to operate Septage Land Application Site with permit #SLAS-78-19 located on Leonard Road in Robeson County in approximate position 34.68604° N latitude and -78.83669° W longitude. The site is to be operated in accordance with 15A NCAC 13B .0800 Septage Management, the information stated in the approved application, and the conditions of this permit. The unauthorized disposal of any liquid or solid wastes other than those specified in the conditions of this permit will be considered a violation of the conditions of this permit. Failure to comply with the conditions of this permit may result in permit suspension, permit revocation, action for injunctive relief, administrative penalties, or other remedies as provided in G.S. 130A, Article 1., Part 2.

This permit shall be reviewed annually to determine if soil test results and management activities are in compliance with the Septage Management Rules and the conditions of this permit. Modifications, where necessary, shall be made in accordance with rules in affect at the time of review.

Date Issued 8/24/2012

Martin A. Gallagher, Branch Head Solid Waste Section Operator: Rachel Locklear

SLAS# 78-19 County: Robeson Page 2 of 3

#### **Permit Conditions:**

1. This permit shall become void if the soils fail to adequately assimilate the septage and shall be rescinded unless the site is maintained and operated in a manner which will protect the assigned water quality standards of both surface and ground waters.

- 2. This site shall be operated and maintained in accordance with the nutrient management plan submitted by Rachel Locklear and approved by the Division of Waste Management. The 14.7 acre site shall be divided into three fields know as Field A (7.4 acres), Field B (4.0 acres) and Field C (3.3 acres). The 30 day waiting period between the last application of septage and the harvest of the crop shall be maintained. All discharges shall be at locations on the site consistent with the crop rotation in the approved plan.
- 3. This site shall be operated and maintained in accordance with the erosion and runoff control plan submitted by Rachel Locklear in such a manner as to prevent the migration of wastes off of the designated waste receiving site. Any site improvements noted in the plan must be installed within 30 days of plan approval. The installation of groundwater monitoring wells shall be required as deemed necessary by the Division.
- 4. The issuance of this permit does not preclude the Permittee from complying with any and all statutes, rules, regulations, or ordinances which may be imposed by other local, state and federal government agencies which have jurisdiction. It is the responsibility of the Permittee to be in compliance with the requirements of 40 CFR 503.
- 5. This permit may be modified or reissued to incorporate any conditions, limitations and/or monitoring requirements the Division deems necessary to adequately protect the environment and public health.
- 6. This site is only permitted for the land application of domestic septage (including portable toilet waste) and grease septage. Domestic septage pH shall be raised to 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 30 minutes prior to land application. Grease septage or grease septage mixed with domestic septage shall be raised to pH 12 or higher by alkali addition and, without the addition of additional alkali, shall remain at 12 or higher for 2 hours prior to land application.
- 7. This site contains approximately 14.7 acres that are available for septage land application. The maximum annual application rate shall be 50,000 gallons per acre per year, for a total maximum annual application rate of 735,000 gallons. This application rate assumes equal septage distribution, on an annual basis, over the permitted area. Monthly septage applications shall not exceed the monthly relative application rates given in the approved nutrient management plan for the site.
- 8. An approved above ground septage detention system with a minimum design capacity of 14,134 gallons shall be available prior to operation of this site unless an approved wastewater treatment plant is available for use during periods of adverse weather. The storage capacity may be adjusted if it is demonstrated during the operation of the site that this volume of storage is inappropriate.
- 9. Only the area designated on the attached site map(s) shall be utilized for septage disposal. Each load of septage discharged at the site shall be distributed from a moving vehicle in such a manner as to have no standing water when the discharge is complete. Septage shall not be applied during periods of high soil moisture.

Operator: Rachel Locklear

SLAS #: 78-19 County: Robeson Page 3 of 3

10. Septage shall not be applied during any precipitation event, or if there is standing water on the soil surface, if the soil surface is frozen, or if the soil surface is snow covered. The Permittee shall consider pending weather conditions when making the decision to land apply in order to prevent any discharge of septage outside of the permitted boundary.

- 11. Septage applications that will result in ruts greater than three inches in the soil surface are prohibited.
- 12. Any discharge of septage outside of the permitted boundaries via runoff, aerial drift, etc. is prohibited.
- 13. This permit shall become void unless the land application activities are carried out in accordance with the conditions of this permit and in the manner approved by this Division. No one other than the permittee shall discharge septage at this site without prior appropriate notification and written approval of the Division.
- 14. Prior to any transfer of this land, a notice shall be given to the new owner that gives full details of the materials applied or incorporated at this site. The Division shall be notified prior to site closure. This permit is non-transferable.
- 15. This permit shall expire on February 22, 2016. Modifications, when necessary, shall be made in accordance with the rules in effect at the time of renewal. An application for permit renewal shall be submitted at least ninety (90) days prior to the permit renewal date. A septage application log for the period of time this permit was valid shall be submitted along with an application for permit renewal or modification. The information required in the log is described in Rule 15A NCAC 13B .0838(e)(1) of the NC Septage Management Rules and 40 CFR Part 503.17(b) of the Federal Register.
- 16. Records shall be kept in accordance with 40 CFR 503.17(b). These records shall be made available to a representative of the Division upon request.
- 17. Any duly authorized officer, employee, or representative of the Division may, upon presentation of credentials, enter and inspect any property, premises, or place on or related to the disposal site and facility at any reasonable time for the purpose of determining compliance with this permit; may inspect or copy any records that must be kept under the conditions of this permit; or may obtain samples of groundwater, surface water, or leachate.
- 18. Field separations in the nutrient management plan and all pertinent setbacks shall be clearly located on the site. Boundaries of the permitted septage land application fields shall be clearly marked on the ground.
- 19. The areas which can be used for land application of septage shall be maintained at least 500 feet from any existing wells, residences, places of business, or places of public assembly. Septage shall not be disposed of within 50 feet of any property line, within 100 feet of any ditch or within 200 feet of any surface water unless specified otherwise.



#### North Carolina Department of Environment and Natural Resources

Division of Waste Management

Beverly Eaves Perdue Governor

Dexter R. Matthews
Director

Dee Freeman Secretary

August 24, 2012

Rachel Locklear 2161 Evergreen Church Road Pembroke, NC 28372

RE:

SLAS permit modification

Rachel Locklear SLAS-78-19

**Leonard Road in Robeson County** 

Dear Mrs. Locklear:

The NC Division of Waste Management has reviewed your application to modify a septage land application site permit in Robeson County. Your application has been approved and your permit, # SLAS-78-19, is enclosed. If you have any questions about your permit, we'll need the number in order to answer your questions.

Please read all of your permit conditions carefully. Your nutrient management and soil erosion and runoff control plans have been included in your permit's conditions. In particular, review Permit Condition 12, which states you need to submit septage application logs for your site in order to renew your permit. These logs need to cover the entire time your current permit is valid. For details on the information you should include, consult the NC Septage Management Rule 15A NCAC 13B .0838(e)(1) and the Federal register's 40CFR Part 503.17 (b). This permit condition also states that this permit is valid until February 22, 2016. If you have any questions, please ask for assistance as rule violations could expose you to administrative penalties.

Please note that to land apply industrial or commercial septage at a permitted septage disposal site you must have prior approval from the NC Division of Waste Management. The waste must be sampled prior to being removed from the system. Generally, the Division will request that you have a waste analysis run on septage from each commercial or industrial septage generator before that type of septage is approved for land application.

Use of a land application site or septage detention or treatment facility that is not permitted may result in administrative penalties up to \$15,000 per violation in accordance with NC General Statute 130A-22.

Please call me at (910) 433-3352 or Martin Gallagher at (919) 707-8280 if you have any questions.

Sincerely,

Connie Wylie, Soil Scientist

Composting & Land Application Branch

NorthCarolina
Naturallu

### APPLICATION FOR A PERMIT TO OPERATE A SEPTAGE LAND APPLICATION SITE

North Carolina Department of Environment and Natural Resource Division of Waste Management – Solid Waste Section 401 Oberlin Rd., Ste. 150, Raleigh, N.C. 27605



	Site and Operator Information  1. Applicant Address Address Address Address	DIVISION OF WASTE MANAGEM  A FAYETTEVILLE REGIONAL OFFI				
	Phone 910-734-1759 910-671-(	0563				
2.						
3	3. Landowner Address  Rachel Locklear  2101 Evergreen Church Rd  Hembroke, N. 28372					
4.	4. Site Location: County Ribbeson State Road Number Directions to site: 41 N to Tarkel Rd. Right Committee Left on Lenard's Ld.					
5.	5. Indicate whether request is: new renewal modifi	cation				
	For a permit renewal or modification, provide the following information: Existing site permit number: Obe permit expiration days	ate: Jan-20-13				
6. acres	6. Number of acres meeting the requirements of the N.C. Septage Manag	ement Rules:				
7.	<ol> <li>Substances other than septage or grease trap pumpings previously disp         (a) None, or (b) Attach a list indicating other substances, the         dates of discharge.</li> </ol>	posed of on the site: amounts discharged, and the				
8. N/A	Attach written, notarized landowner authorization to operate a septage disposal site signed by the landowner (if the permit applicant does not own the property). If a corporation owns the land use a corporate landowner authorization form. If limited liability company owns the land, use a limited liability company landowner authorization form.					
W.	Attach site evaluation report, including aerial photograph and soil analys the Division prepared the report.	sis with metals results, unless				
40	O. Attach a vicinity map (county road map showing site location).					
(0)	over)					

II. Site Management Information:	
The following information shall be included with the application form:  Nutrient Management Plan  ABC Adding 3rd Field  2. Soil Erosion and Runoff Control Plan	
3. Alternative plan for disposal (detention facility permit number or wastewater treatment plant authorization): SDTF 78.19	
<ul> <li>4. Types of septage proposed to be discharged at the site (check all that apply):</li> <li>(a) Domestic septage pumped from septic tanks</li></ul>	
5. Proposed treatment method of each type of septage to be land applied (use additional paper to explain if necessary): Soptage lime Stabilize to ph 12 for a page to ph 12 for a page traps for 2 hours for long that waste shall be ph for land application to acciv.  6. Proposed method of applying septage to land, including septage distribution plan if required * (not paper to explain if necessary): A spash plate from a moving pumper fruck.	uble 12-
7. Demonstration from the appropriate state or federal government agency that the land applicatio complies with the Endangered Species Law ** or if any part of the site specified is not agriculture land (use additional paper to explain if necessary):	n site al
III. Certification	
<ol> <li>I hereby certify that:         <ol> <li>The information provided on this application is true, complete, and correct to the best of my knowledge.</li> <li>I have read and understand the N.C. Septage Management Rules, and</li> <li>I am aware of the potential consequences, including penalties and permit revocation, for fail to follow all applicable rules and the conditions of a Septage Land Application Site permit.</li> </ol> </li> <li>Fachel Locklear         <ol> <li>Date</li> </ol> </li> </ol>	ing
ote: This application will not be reviewed until all made of the second	

Note: This application will not be reviewed until all parts of the application are complete.

\* Refer to Section .0821(e) of the N.C. Septage Management Rules.

\*\* Refer to Section .0821(g) of the N.C. Septage Management Rules.

\*\*\*Signature of company official required.

## Nutrient Management Plan For Septage Applications to Coastal Bermudagrass and Small Grains

Prepared for:
Don Locklear Septic Tank Cleaning
2161 Evergreen Church Rd.
Pembroke, NC 28372
(910) 671-0563
(910) 521-9304
(910) 521-0905 home
(910) 734-7758 mobile

#### A. General Information:

- 1. This Nutrient Management Plan has been developed for SLAS-78-19 off of Leonard Road in Roberson County.
- Soil sampling of the septage land application site shall be done annually for nutrients and heavy metals. Samples shall be sent to the NCDA & CS Agronomic Lab.
- This site contains 14.7 acres divided into three fields as follows: Field A (7.4 acres), Field B (4.0 acres), and Field C (3.3 acres). Fields B and C will be managed together in regards to land application, 30 day waiting period, and harvest.
- 4. The dominant soil series at this site is Pocalla (PoB).
- 5. Septage will not be applied where the site is untrafficable or a loaded truck leaves a depression 3 inches or greater and/or the soil moisture is too great to adequately absorb the septage.
- 6. Septage storage shall be provided to account for the average volume of septage pumped per week, or an alternative plan, such as disposal at a waste treatment plant, should be in place. Septage Detention Facility, SDTF-78-19, is available for storage and treatment of septage prior to land application.

#### B. Crops to be grown and approximate planting and harvest times:

- All three fields (14.7 acres) have been established in Coastal Bermudagrass.
   If the bermudagrass stands falls below 80% ground coverage, then the field or bare areas shall be resprigged within February April at 30 40 bushels of sprigs per acre.
- Small grains will be overseeded into the bermudagrass in October or November at a rate of approximately 120 lbs/ac if broadcasted or 100 lbs/ac if drilled.
- 3. Harvesting of the Coastal Bermudagrass will be as needed, depending on weather conditions. Two to four cuttings per year are typically done when the bermudagrass reaches a height of approximately 12 inches. Harvesting of the small grains will be from March May.
- 4. Weed control is best achieved through a well-managed bermudagrass stand that is competitive. Mismanagement of the bermudagrass such as failure to harvest the crop at recommended intervals and crop damage from improper septage applications, can lead to increase weed pressure. If weeds become a problem, a herbicide may be needed. Contact your technical specialist, local cooperative extension agent, or regional agronomist for assistance.

#### C. Nitrogen needs for crops grown:

R.Y.E. = Realistic Yield Expectations
N Application Rate = Suggested N application rate based on R.Y.E. for soil type.

Crop (cut for hay)	R.Y.E.		N App. Rate	lbs N/ac
Coastal Bermudagrass Small Grains (wheat or rye)	5.0 tons/ac 2.0 tons/ac	X	49 lbs N/dry ton 50 lbs N/dry ton	= 245 = 50
1			Total	= 295

So 295 / 0.0026 = 113,461 gallons septage/acre. However, the annual application rate is not to exceed 50,000 gallons per acre. Thus, additional nitrogen would be needed to meet suggested N application rate.

#### D. Relative application rate for all three fields

Month	Application Rate		
January	Low		
February	Low		
March	Medium		
April	High		
May	Medium		
June	High		
July	High		
August	Medium		
September	Medium		
October	Low		
November	Low		
December	Low		

None = 0 gallons; Low = 5,000 gallons; Medium = 10,000 gallons; High = 15,000 gallons.

NOTE: Cumulative application rate is not to exceed the permitted annual application rate of 50,000 gallons per acre.

#### E. Application Method

The preceding information is based on septage being evenly applied over the entire permitted site by spraying uniformly from moving pump truck.

#### F. Additional Fertility Requirements

Additional commercial nitrogen can be added to the crop. However, the total applied nitrogen from septage and the commercial source shall not exceed the nitrogen requirement of that crop.

Phosphorous and potassium shall be added in accordance with the soils test results for the crops grown.

#### G. Harvest of Crops:

- The bermudagrass will be cut as hay and baled whenever it reaches approximately 12 inches in height or roughly every 4 to 6 weeks beginning in June. At least three harvests will be made from each field each year unless under drought conditions.
- 2. The small grains will be cut and baled as hay in March May of each year.

- 3. A 30-day waiting period must be observed between last application of septage and harvest. Beginning about the first of March each year, septage will be applied strictly to Fields B and C while the rye on Field A is undisturbed for 30 days. After 30 days, the rye in Field A will be harvested and septage application switched to Field A while Fields B and C are idle. After an additional 30 days, in late April to early May, the rye will be harvested from Fields B and C. By early May, a rotation will be established which can cycle every 30 to 45 days between bermudagrass harvests. By the end of October, the rye will have been planted and the entire site will be available for septage application until the end of February the following year.
- The septage applied forage will be harvested by contracting a third party to cut and harvest the hay for animal feed.

#### SOIL EROSION AND RUNOFF CONTROL PLAN

Given that slopes on this site do not exceed five percent, a 5 feet buffer, planted in bermudagrass and overseeded in small grains, should suffice to prevent septage waste from migrating off of the fields. (More severe site conditions could require that soil erosion structures be installed before septage can be applied). Site is also surrounded by a forest canopy of at least 50 feet.

Submitted by:	Don Locklear Septic Tank Cleaning	)	
Sumitted by: _	Tackel gelse Site Operator	Date:	8-22-12

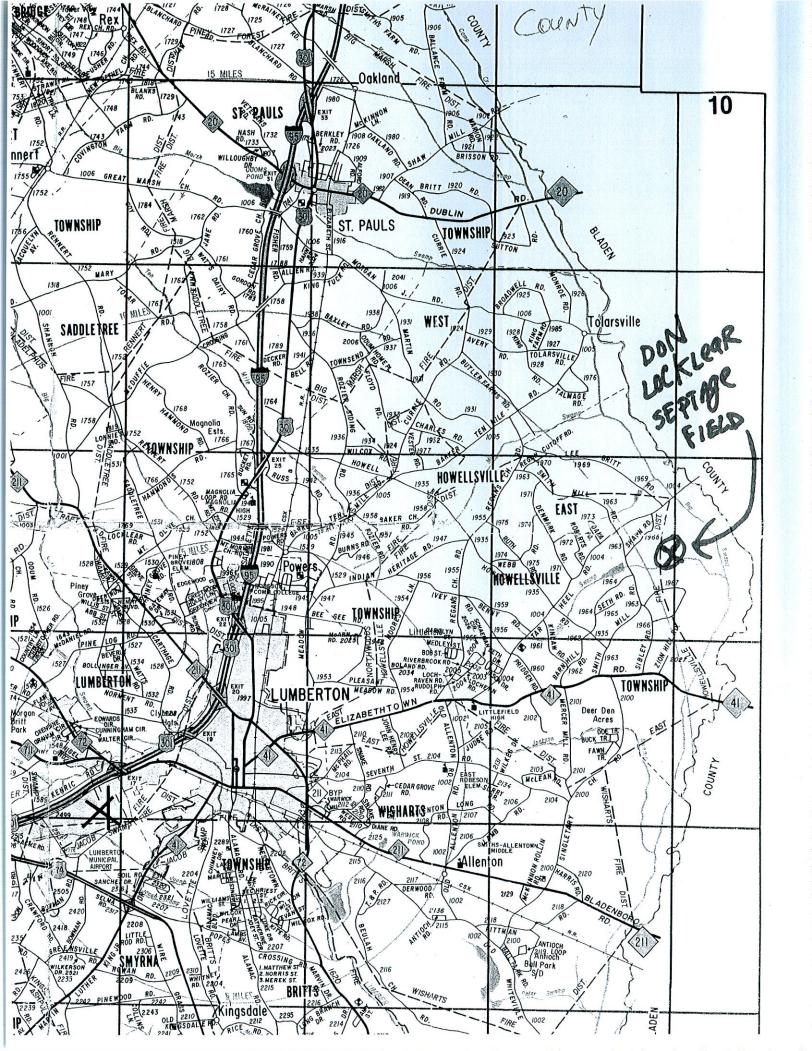
Minor modifications were made to the nutrient management plan prepared by Becky Spearman on 3-26-10. Modifications made by Connie Wylie.

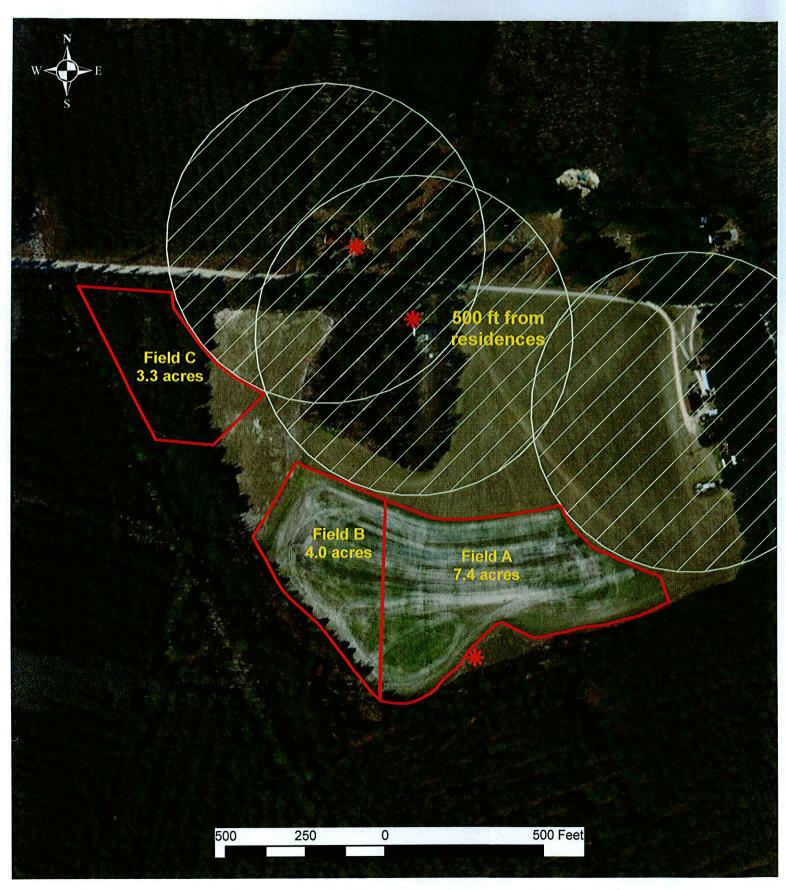
Plan prepared by: <u>Becky Spearman</u> Date: <u>3/26/2010</u>

Address: <u>Livestock Extension Agent</u>

P.O. Box 249, Elizabethtown, NC 28337

Phone: (910) 862-4591 email:beckv spearman@ncsu.edu





Source: Bing Maps aerial imagery, ESRI, (c) 2010 Microsoft Corporation and its data suppliers; site boundary, NC DENR Division of Waste Management.

Map created by NC DENR Division of Waste Management, Compost and Land Application Branch for permitting purposes only.